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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/777,016 | 02/11/2004 | Joe Karkosch | 502336 | 2227 |
| 53609 | 7590 | 09/26/2005 | EXAMINER | |
| REINHART BOERNER VAN DEUREN LTD. 483 NORTH MULFORD ROAD SUITE 7 ROCKFORD, IL 61107 | | | SELF, SHELLEY M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3725 | |

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|--------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/777,016 | KARKOSCH ET AL. |
| | Examiner Shelley Self | Art Unit 3725 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 12 July 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11, 13, 15, 16, 18-39, 43 and 45-51 is/are pending in the application.
 4a) Of the above claim(s) 12, 14, 17, 40-42 and 44 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1, 2, 7-11, 13, 15, 16, 18, 19, 22-33, 38, 39, 43, 46, 47 and 51 is/are rejected.
 7) Claim(s) 3-6, 20, 21, 34-37, 48, -50 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11 February 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 7/12/05; 5/20/04.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of the invention of Group III, species figures 25-35 (clms. 1-11, 13, 15, 16, 18-39, 43 & 45-51) in the reply filed on July 12, 2005 is acknowledged. Failure of Applicant to positively recite any traversal arguments renders the election an election without traverse.

Claims 12, 17, 40-42 and 44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 12, 2005.

Additionally Applicant's change of Power of Attorney notification and correspondence address change have been received and acknowledged.

Information Disclosure Statement

The informational disclosure statement(s) filed July 12, 2005 and May 20, 2004 have been considered.

Specification

The disclosure is objected to because of the following informalities:

- Pg. 8 line 12, following "handle 164" delete **—also--**
- It is unclear what is meant by the following

Pg. 5, lines 29-30 "...*the centering bit also includes a second centering portion 26d spaced from the second end 26d.*"

Pg. 8, line 14, "...*for movement to adjust position...* "

Pg. 8, line 30, "...*which includes of the includes...* "

Appropriate correction is required.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the *first and second conical surfaces* (clms. 9, 24) and *conical engagement surface* (clm. 32) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "222" has been used to designate both *collar* (pg. 10, lines 3-4) and *mounting plate* (pg. 10, lines 4, 8 & 9).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 31 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 31 as written improperly depends from following claim 32. Accordingly, claim 31 has not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 9, 24 and 32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. With regard to claims 9 and 24, neither the specification nor the drawings provide support for *first and second generally conical surfaces...wherein vertical interference between the first and second generally conical surfaces provide for vertical retention in a first direction...wherein interlocking*

engagement between first and second flanges provides for vertical retention. With regard to claim 32, neither the specification nor the drawings provide support for *generally conical engagement surface for vertically engaging the mounting adapter.* Clarification is required to facilitate a clear understanding of the claimed invention and proper application of the prior art. Accordingly no art has been applied to these claims though in their presently presented form they are not deemed to be allowable.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-11, 13, 15, 16 and 18-26 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to claims 1 (line 6) and 15 (line), “adapted to position the router” is not clear, i.e., adapted to position the router relative to what?

With regard to claim 16, line 6, it is unclear what is meant by, “*second vertical engagement first means*”. Clarification is required to facilitate a clear understanding of the claimed invention and proper application of the prior art. Accordingly no art has been applied to claim 16, though in its presently presented form the claim is not deemed to be allowable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7, 8, 10, 11 as best as can be understood and claims, 27-31, 33, 38, 39, 43, 46, 47 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Hedrick (5,289,861).

With regard to claim 1 as best as can be understood and claim and 27, Hedrick discloses a router/tool attachment system comprising: a router (12) including a router housing and spindle (fig. 1) the spindle (inherently disclosed as all routers must have a spindle about which a bit/collet/chuck is affixed to router motor to form a shape/grove into a workpiece) adapted to revolve relative to the housing about a vertical axis; a mounting adapter/plate (14) along an end face of the router housing (fig. 1, 2), the mounting adapter/plate including an annular mounting surface (Examiner notes annular to be defined as of or relating to, or forming a ring; a ring to be defined as a circular line, figure or object) and having a plurality of holes (38) and a central hole adapted for communicating a spindle therethrough; at least two of the holes matching with corresponding holes in the router housing (fig. 1) a router attachment adapted to position the router (12), the router attachment (16, 18) including an attachment housing with an annular attachment surface that mates with the annular mounting surface (fig. 2); wherein the router attachment (16, 18) is rotatable between a release position and an attached position, the router/tool attachment being removable from the mounting adapter/plate (14) in the release position, the router/tool attachment vertically engaging the mounting adapter in opposing directions along the axis in the attach position for vertical retention of the router attachment; a lock (col. 10, lines 28-30, 33-36) locking the router/tool attachment (16,18) and the mounting adapter in the attach position to prevent relative rotation therebetween, the lock subject to

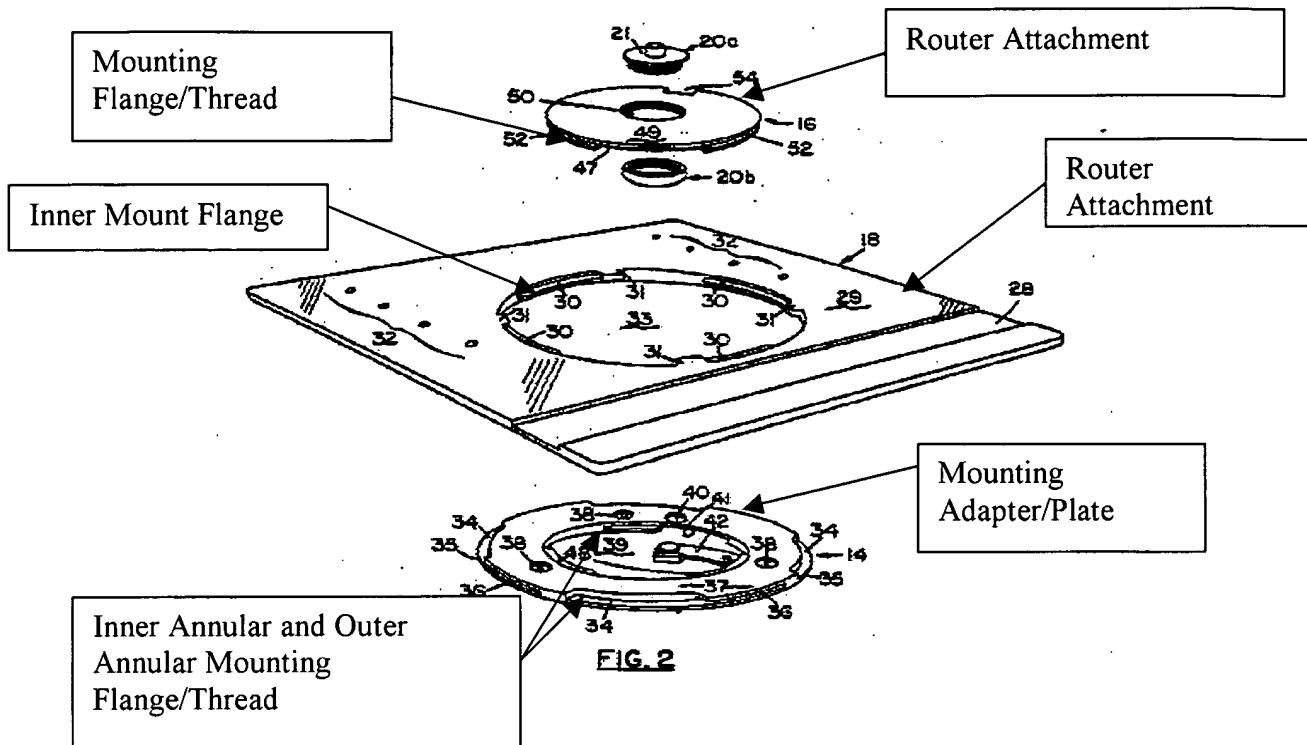
manual actuation to allow rotation between the router attachment and the mounting adapter for detachment of the router attachment from the mounting adapter.

Examiner notes that the router attachment and mounting adapter are manually vertically rotatable relative to each other so as vertically lock and release the mating structure of the mounting adapter (14) to that of the router attachment (16, 18).

Further Examiner notes that the mounting adapter has two annular mounting surfaces (i.e., an inner mounting surfaces and on outer/radial mounting surface) of which two router attachments (16, 18) are able to be attached/mounted to the corresponding mounting adapter mounting surfaces.

With regard to claim 2 as best as can be understood, Hedrick discloses the lock comprises corresponding snaps (30, 31, 36) on the attachment and mounting surface (fig. 2), the snaps snapping past each other during rotation from the release position to the attached position to hold the router attachment (18) in the attached position (col. 10, lines 28-33).

With regard to claim 7 as best as can be understood, Hedrick discloses the mounting adapter (14) includes first flanges (fig. 2) projecting radially along the annular mounting surface, and wherein the attachment housing includes second flanges (fig. 2) projection radially along the annular attachment surface, the first and second flanges being vertically movable past each other in the release position to permit vertical removal of the router attachment from the mounting adapter, the first and second flanges interlocking with each other when in the attach position to prevent vertical removal.



As to the flanges being vertically (clms. 7, 22) movable past each other and vertically engaging (clms. 15, 18), Examiner notes the router attachment (16, 18) and the mounting adapter (14) must be moved both vertically and rotationally so as to fit the mating flanges to each surface together to facilitate locking and unlocking of the router attachment (16, 18) and the mounting adapter (14) to each other.

With regard to claim 8 as best as can be understood, Hedrick discloses the first flanges lie in a common plane substantially perpendicular to the vertical axis, and wherein the second flanges lie in a common plane substantially perpendicular to the vertical axis, and wherein the first flanges and second flanges are angularly spaced at equidistant angular intervals about the vertical axis (fig. 2)

With regard to claim 10 as best as can be understood, Hedrick discloses wherein the router attachment (16, 18) comprises a generally circular collar portion (fig. 2) defining the

annular attachment surface, the collar portion centrally receiving (fig. 2) the mounting adapter (14). (Examiner notes collar is understood to be something resembling a ring in shape.)

With regard to claim 11 as best as can be understood and claim 38, Hedrick discloses wherein the router/tool attachment (16, 18) comprises a generally circular collar portion (fig. 2) defining the annular attachment surface, the collar portion centrally receiving (fig. 2) the mounting adapter (14).

With regard to claim 27, Hedrick discloses a tool attachment for mounting to a mounting adapter (14) along an axis, the mounting adapter including an annular mounting surface (fig. 2) a plurality of mounting flanges (See above with reference to claim 7) angularly spaced, the tool attachment comprising: an attachment housing (16, 18) including a generally circular attachment surface sized and configured to mate with the annular mounting surface (14); and a plurality of attachment flanges projecting radially from the attachment housing (fig. 2) along the attachment surface, the attachment flanges being arranged in a common plane generally perpendicular to the axis and angularly spaced about the axis, a plurality of gaps defined between adjacent pairs of attachment flanges providing sufficient clearance to receive the mounting flanges through the gaps (fig. 2).

With regard to claim 28, Hedrick discloses means for rotationally locking (30, 31, 34, 35, 36) the attachment housing (16, 18) to the mounting adapter (14).

With regard to claim 29, said rotational locking means comprises at least one snap (30, 31, 36) adapted to resiliently engage the mounting adapter (col. 10, lines 28-33). Examiner understands a snap to be a fastener on surfaces of two mating opposing elements, wherein one element has a protruding member (30) and the opposing mating element has a

recess (31) for receiving the protruding member (30) so as to snap/fasten the opposing mating elements together.

With regard to claim 30, Hedrick discloses the tool attachment wherein the at least one snap is formed into at least one of the attachment flanges (fig. 2).

With regard to claim 33, Hedrick discloses the attachment housing (16, 18) comprises plastic material (col., 5 lines 27-28; col. 6, lines 5-7, 40, 42, 43).

With regard to claim 39, Hedrick discloses the attachment surface (fig. 2) is formed into a radial periphery of the attachment housing with the attachment flanges projecting radially outward (fig. 2), the attachment housing (16) adapted to be inserted into an opening in the mounting adapter (fig. 14)

With regard to claims 43 and 46 Hedrick discloses a method of releasably attaching a tool attachment to a mounting adapter (14) about an axis, the method comprising installing the tool attachment (16, 18) onto a mounting adapter (14) along the axis to facilitate engagement in a first direction along the axis between mounting and attachment surfaces of the mounting adapter and the tool attachment (fig. 2) respectively; facilitating relative rotation (col. 10, lines 11-16, 33-36) about the axis between the mounting adapter (14) and the tool attachment (16, 18) to cause interlocking engagement between corresponding flanges along the first and second attachment surface (fig. 2) and thereby provide for retention of the tool attachment to the mounting adapter in a second direction opposition said first direction and rotationally locking the mounting adapter to the tool attachment (col. 10, lines 11-16) wherein said facilitating relative rotation comprising rotating at least one of the mounting adapter (14) and the tool attachment (16, 18) about the axis

until corresponding stop surfaces (30, 31, 34, 35, 36) between the mounting adapter (14) and the tool attachment (16, 18) abut.

With regard to claim 47, Hedrick discloses wherein said rotational locking comprises resiliently snapping (30, 31, 36) the tool attachment (18) to the mounting adapter (14). See above with reference to claim 29.

With regard to claim 51, Hedrick discloses wherein said installing comprises seating corresponding mating surface between the mounting adapter (14) and the tool attachment (18) in a first direction along the axis, passing a plurality of first flanges of the mounting adapter (14) through corresponding gaps (fig. 2) formed between a plurality of second flanges of the tool attachment (18), and said facilitating rotation (col. 10, lines 11-16, 28-35) comprises interlocking the first and second flanges to retain the tool attachment (18) to the mounting adapter (14) and prevent removal in a second direction opposite said first direction.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13, 15, 18, 19, 22, 23, 25, 26 as best as can be understood and claim 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hedrick (5,289,861) alone or in view of McFarlin Jr. et al. (6,520,227). With regard to claims 13, 15 as best as can be understood and claim 45, Hedrick discloses a plurality of holes (38), a central opening adapted to convey the

spindle therethrough and screws fastening the mounting plate to the router housing (col. 5, lines 26-32). Hedrick does not disclose bolts. The selection of bolts over that of screws is one of ordinary mechanical expedients (i.e. screw, bolt, nail) and requires only routine skill in the art. It would have been obvious at the time of the invention to one having ordinary skill in the art to fasten the mounting adapter to the router housing using anyone of a screw, bolt or nail.

Moreover, McFarlin Jr. teaches in a similar art a router (10) having mounting adapter including a mounting plate (30) wherein the mounting plate is secured (col. 2, lines 30-32) to the router housing via screws or bolts (24). Because the references are from a similar art, and deal with a similar problem (i.e., securing the mounting adapter/plate to the router base via a fastener) it would have been obvious at the time of the invention to one having ordinary skill in the art to replace Hedrick's screws with bolts so as to securely fasten the mounting adapter plate (14) to the router (12) housing as taught by McFarlin Jr. (fig. 3).

As to the mounting adapter/plate and router attachment (clm. 15) see above with reference to claim 1.

With regard to claim 18 as best as can be understood (see above with reference to claim 1), Hedrick discloses corresponding annular mounting attachment surfaces (fig. 2) wherein the router attachment is rotatable between a release position and an attach position, the router attachment being removable from the mounting adapter plate, the router attachment vertically engaging the mounting adapter plate.

With regard to claim 19 as best as can be understood Hedrick discloses corresponding snaps (30, 31, 34, 35, 36).

With regard to claim 22 as best as can be understood see above with reference to claim 7, Hedrick discloses first and second flanges.

With regard to claim 23 as best as can be understood see above with reference to claim 8.

With regard to claim 25 as best as can be understood see above with reference to claim 10.

With regard to claim 26 as best as can be understood Hedrick discloses the router attachment (16) is received into the central hole (fig. 2), the router attachment defining a central hole (fig. 2) opening for communication the spindle therethrough when mounted to the router (12).

Allowable Subject Matter

Claims 3-6, 20, 21, 34-37 and 48-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose or fairly suggest the following:

a router attachment system wherein the *lock comprises an actuator carried by the attachment housing, the actuator movable between a lock position and an unlock position* in combination with the rest of the claimed limitations as set forth in claims 3, 20, 34 and 48.

The prior art of record, Hedrick discloses a router attachment system including a router, a mounting adapter, router attachment for mating to the mounting adapter and a means for locking the mounting adapter and router attachment to resist movement. Hedrick discloses the mounting

adapter having radial peripheral first mounting surface that mates with an inner radial peripheral mounting surface of the router attachment for attachment of a first type of router attachment.

Hedrick however does not disclose the means for locking to include an actuator that is *carried by the attachment housing and is moveable between a lock and unlock position*. Instead, Hedrick discloses a snug fit between the tabs (30), receptacles (36) and stops (31) that lock or secure the mounting adapter to the router attachment (col. 10, lines 28-31). Therefore, Hedrick neither anticipates nor renders obvious the claimed invention as set forth in claims 3, 20, 34 and 48.

Neither the prior art of record, nor any combination thereof discloses the claimed invention as set forth in claims 3, 20, 34 and 48. Accordingly, claims 3, 20, 34, 48 and their dependents contain allowable subject matter over the prior art of record.

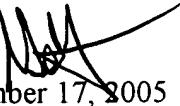
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelley Self whose telephone number is (571) 272-4524. The examiner can normally be reached Mon-Fri from 8:30am to 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular and After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on accessing the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SSelf 
September 17, 2005